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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/723,480 | 11/28/2000 | Dave McDysan | RIC00044 | 7587 |

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MCI, INC
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW, 10TH FLOOR
WASHINGTON, DC 20036

EXAMINER

BATES, KEVIN T

ART UNIT PAPER NUMBER

2155

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/723,480 | Applicant(s) MCDYSAN ET AL. | |
| | Examiner Kevin Bates | Art Unit 2155 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) • | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6-1-04, 7-14-04</u> . • | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an amendment received on June 14, 2004.

The Power of Attorney was received on May 28, 2004.

The Information Disclosure Statements were received on June 1, 2004 and July 14, 2004.

Claims 1-40 are pending in this application

Response to Amendment

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6, 8-9, 14-16, 18-21, 24, 26, 28, 33-35, 37-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Gibson (6680943).

Regarding claims 1 and 21, Gibson discloses a method of communication in, a network access system including an external processor (Column 6, lines 58 – 60) and a programmable access device (Column 6, lines 10 – 16), said method comprising: transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device (Column 24, lines 43 – 51; Column 23, lines 4 – 8; Column 9, lines 40 – 44); receiving, by the

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programmable access device, messages from a first network external to the network access system via a first network interface (Column 24, lines 28 – 30); communicating a first portion of the received messages from the programmable access device to the external processor for service processing in accordance with the configuration (Column 24, lines 28 – 34; Column 9, lines 32 – 34); and routing a second portion of the received messages not communicated to the external processor from the network access system via a second network interface different (Column 9, lines 43 – 49, where once a session is established all packets belonging to that session are routed based on the new path reservations) from the first network interface to a second network external to the first network access system, wherein the second network is different from the first network (Column 9, lines 27 – 29, where the request comes from an outside network trying to create a session forward things through the inside network).

Regarding claims 4 and 24, Gibson discloses transmitting a control message comprises transmitting a monitor control message to establish a configuration of a monitor in the programmable access device; and communicating messages comprises communicating reporting messages from the programmable access device to the external processor in response to the configuration of the monitor (Column 10, lines 24 – 38).

Regarding claims 8 and 28, Gibson discloses transmitting a control message comprises transmitting a forwarding table control message to establish a configuration of a forwarding table in the programmable access device (Column 24, lines 11 – 18).

Regarding claim 9, Gibson discloses establishing a configuration of a forwarding table comprises establishing a new forwarding table in the programmable access device (Column 9, lines 40 – 44).

Regarding claims 6 and 26, Gibson does not explicitly indicate transmitting a monitor control message comprises transmitting a threshold activity level (Column 9, lines 32 – 37).

Regarding claims 14 and 33, Gibson discloses transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device comprises transmitting a session deletion control message; and the method further comprises the programmable access device deleting a session specified by the session deletion control message because it discloses starting a session (INVITE) and deleting (tearing down or cancelling) a session (BYE and CANCEL) where these messages go from the control node to the access device (Figure 3, Column 12, lines 7 – 14; Column 12, line 65 – Column 13, line 17).

Regarding claims 15 and 34, Gibson discloses the external processor signaling network hardware to establish a network connection in response to receipt of a message from the programmable access device (Column 9, lines 32 – 40).

Regarding claims 16 and 35, Gibson discloses exchanging keepalive messages between the external processor and the programmable access device (Figure 8).

Regarding claims 18 and 37, Gibson discloses that in response to said control message, sending an acknowledgement from said programmable access device to said external processor (Column 14, lines 21 – 32).

Regarding claims 19 and 38, Gibson discloses communicating a state of a session from the programmable access device to the external processor in response to failure of a service controller servicing the session in the external processor (Column 22, line 63 – Column 23, line 3).

Regarding claims 20 and 39, Gibson discloses transmitting a control message comprises transmitting a control message via an intermediate communication network (Column 10, lines 8 – 14).

Regarding claim 40, Gibson discloses a distributed router comprising: a first network interface through which packets are communicated with a first network (Column 9, lines 27 – 30); a second network interface different from the first network interface through which packets are communicated with a second network different from the first network (Column 9, lines 27 – 30); a programmable access device configured to input messages from the first network via the first network interface (Column 24, lines 28 – 30); and an external processor configured to receive, from the programmable access device, a first portion of the input messages and to transmit a control message to the programmable access device specifying a configuration to control the selection of the first portion (Column 24, lines 28 – 34; Column 9, lines 32 – 34), wherein the programmable access device forwards a second portion of the input messages not received by the external processor for routing via the second network interface to the

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second network (Column 9, lines 43 – 49, where once a session is established all packets belonging to that session are routed based on the new path reservations).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 7, 10-12, 22, 27, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Gai (6651096).

Regarding claim 2 and 22, Gibson does not explicitly indicate that transmitting a control message comprises transmitting a filter control message to establish a configuration of a packet header filter in the programmable access device; and communicating messages comprises communicating network messages filtered from a packet flow by the packet header filter of the programmable access device. Gai teaches in an improved way of configuring a network access device from an external source with access control lists (Column 3, lines 55 – 57). As part of his access control lists, Gai teaches filtering out certain packets which are meant to be dropped (Column 8, lines 14 – 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Gibson's system and Gai's access control lists to give the access points more use than just security such as better identification of incoming packets and rules to follow (Column 3, lines 17 – 40).

Regarding claim 7 and 27, the combination of Gibson and Gai discloses transmitting a control message comprises transmitting a policer control message to establish a configuration of a policer in the programmable access device (Gai, Column 6, lines 19 – 30).

Regarding claim 10 and 29, the combination of Gibson and Gai discloses transmitting a control message comprises transmitting a control message to establish a configuration of a scheduler and one or more associated output buffers in the programmable access device (Gai, Column 6, lines 19 – 30).

Regarding claim 11 and 30, the combination of Gibson and Gai discloses discloses transmitting a control message comprises transmitting a shaper control message to establish a configuration of a shaper in the programmable access device (Gai, Column 6, lines 19 – 30).

Regarding claim 12 and 31, the combination of Gibson and Gai discloses discloses transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device comprises transmitting a control message specifying a source from which packets are not to be accepted; and the method further comprises dropping packets from the specified source by the programmable access device (Gai, Column 6, lines 19 – 30).

Claims 13 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Nilakantan (5541911).

Regarding claim 13 and 32, Gibson does not explicitly indicate that in response to service processing by the external processor, injecting a packet from the external processor into packet flow through the programmable access device. Nilakantan teaches a system with a main server controller access nodes, where the main server can inform the access points to issue messages that it would normally have to send through the network (Column 17, lines 14 – 22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Nilakantan's teachings of reducing traffic by allowing access nodes spoof messages from the server in Gibson's system in order to reduce the number of messages that have to originate from the main server (Column 3, lines 24 – 43).

Claims 3 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Gai as applied to claims 2, 7, 10-12, 22, 27, and 29-31 above, and further in view of Nilakantan.

Regarding claim 3 and 23, the combination of Gibson and Gai does not explicitly indicate limiting communication of network messages from the programmable access device to the external processor by sending the programmable access device a message setting message interface flags in the programmable access device. Nilakantan discloses a system with a main server controller and border nodes, where the main server can tell the border nodes to stop sending certain packets (Column 13, lines 32 – 39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Nilakantan's teachings of reducing traffic by allowing

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access nodes spoof messages from the server in Gibson's system in order to reduce the traffic going to the main server (Column 2, lines 6 – 21).

Claims 5 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Haas (5115432).

Regarding claim 5 and 25, Gibson does not explicitly indicate transmitting a monitor control message comprises transmitting a control message to establish a threshold number of allowed retransmissions. Haas teaches that an access device's configured policy should include a retransmissions policy (Column 7, lines 45 – Column 8, line 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Haas' teachings of a retransmission policy on Gibson's network node reconfiguration system in order to give the network management a tool to help reduce congestion in the system and obtain optimal performance (Column 7, lines 58 – 61).

Claims 17 and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Sauter (5537546).

Regarding claim 17 and 36, Gibson does not explicitly indicate transmitting a control message comprises accessing a control processor on the external processor via an application programming interface (Column 11, lines 14 – 17). Sauter teaches managing a network node with an API (Column 3, lines 40 – 45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Sauter's teaching in having the nodes operate according to an API to allow lots of

different editors to manage the contents and the configuration of the external processor
(Column 1, lines 34 – 45).

Response to Arguments

Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (703) 605-0633. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

KB
September 20, 2004


HOSAIN ALAM
PATENT EXAMINER